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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/876,557	06/07/2001	Takeshi Asano	YOR9-2000-0206US2 (8728-3)	8167

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EXAMINER

WIMER, MICHAEL C

ART UNIT

PAPER NUMBER

2821

DATE MAILED: 03/24/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/876,557

Applicant(s)

ASANO ET AL.

Examiner

Michael C. Wimer

Art Unit

2821

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-10 and 12-26 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 3-10 and 12-14 is/are allowed.
- 6) ☒ Claim(s) 15-26 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 15-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zibrik et al (5138328).

Regarding Claims 15-18, Zibrik et al. show an antenna for a portable computer 10 with display comprising a metal support 50, display device 12 in Fig. 1 and in Fig. 2 an antenna 20 located between the outer side face of the display panel and the inner surface (ground plane 50) of the housing, all arranged as claimed. The antenna includes a radiator portion 30,40 provided at a predetermined distance from a conductive material portion 50 of the panel/housing and defining the ground. It would have been obvious to the skilled artisan that the ground portion 50 is connected to portions of conductive material defining ground, particularly since coax is used to feed the antennas 30,40. The second conductor 38 is connected to the ground plane 50 through the small plate thereon. It would also have been obvious to the skilled artisan that the housing be made of conductive material, if not already contemplated by patentee. The small plate is fastened to the ground plane 50 as recited.

3. Claims 19-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Snowdon (5677698).

Regarding Claims 19-22, Snowdon shows an integrated antenna in Fig. 2, with an conductive RF shielding foil 15 disposed on the back of the display 13, having a hole 17 that defines a slot antenna, and fed with a coax 18 with center and shield conductors (19,20) connected across the slot, all arranged as claimed. It would have been obvious to the skilled artisan that the foil 15 is an RF shield, even though the ground plane 21 is employed here.

Regarding Claim 22, impedance matching is effected in a slot antenna by sliding/positioning the feeder along the length of the slot as desired. A skilled artisan would have found this technique obvious for impedance matching the antenna to the line.

4. Claims 23-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Snowdon in view of Zibrik et al and Rasinger et al (5365246).

Regarding Claims 23-26, Snowdon shows a slot antenna used in a computer display. The antenna of Zibrik et al is essentially an inverted-F and as shown by Rasinger which is made of foil and defines a notch. It would have been obvious to the skilled artisan to employ an inverted-F (notch) as taught by Zibrik et al and Rasinger et al in lieu of the planar slot antenna of Snowdon.

Response to Arguments

Applicant's arguments relative to Claims 15-26 are not persuasive. The computer housing and ground plane are connected and the antenna is mounted and connected to

a conductive strip that is bonded to the ground plane 50. The antennas are inverted F antennas and their operation is well known.

Allowable Subject Matter

5. Claims 1,3-10,12-14 are allowed.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael C. Wimer whose telephone number is (703) 305-3555. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don K. Wong can be reached on (703) 308-4856. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7724 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

A handwritten signature in black ink, appearing to read "Michael C. Wimer".

Michael C. Wimer
Primary Examiner
Art Unit 2821

MCW
03/10/03